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**CLAIMS**

810 1. Breaking device (2) for singularizing ceramic conductor plates (18) along  
weakening lines (20) on a ceramic conductor plate (18), comprising a  
breaking trap (4, 6) having support plates (10, 12) displaceable relative to  
one another, which can be displaced from an initial position in which the  
support plates (10, 12) adjoin along a breaking line (14) and form a essen-  
815 tially flat support surface (16) into a breaking position in which the support  
plates (10, 12) are arranged with an angle one to another and a pinning de-  
vice (52, 8) formed such that it positions the ceramic conductor plate (18)  
for a breaking operation against the support plates (10, 12),

820 characterized in

the breaking trap (4, 6) comprising two support plates (10, 12) which adjoin  
along a breaking line (14),

825 the pinning device (52, 8) comprising an oblong engagement section which  
is narrow transverse to a longitudinal direction, and

the breaking device (2) comprising a positioning element (44) which is  
formed such that it can position the weakening lines (20) consecutively in  
830 alignment with and above the breaking line (14).

2. Breaking device (2) according to claim 1, characterized in the support plates  
(10, 12) comprising breaking line ends (54, 56) adjacent to the breaking lines  
(14), wherein the breaking trap (4, 6) is formed such that the breaking line  
835 ends (54, 56) can selectively be displaced upwardly into a breaking position  
or downwardly into a breaking position.

- 840 3. Breaking device (2) according to claim 1 or 2, characterized in the engagement section (58, 60) of the pinning device (52, 8) being essentially arranged in parallel to the breaking line (14).
- 845 4. Breaking device (2) according to one of claims 1 to 3, characterized in the pinning device (52, 8) comprising two parallel engagement sections (58, 60).
5. Breaking device (2) according to claim 4, characterized in the engagement sections (58, 60) being displaceable relative to one another.
- 850 6. Breaking device (2) according to one of claims 1 to 5, characterized in the pinning device (52, 8) comprising a breaking knife (8) which is connected to the breaking device (2) such that it can be positioned above a breaking line (14) and moved in direction of and beyond the breaking line (14), wherein the support plates (10, 12) are arranged resiliently such that the breaking line ends (54, 56) of the support plates (10, 12) are displaced downwardly beyond the breaking line (14) into the breaking position during the course of movement of the breaking knife (8).
- 855 7. Breaking device (2) according to one of claims 1 to 6, characterized in at least one breaking line end (54, 56) of the support plates (10, 12) of the breaking trap (4, 6) being upwardly displaceable, the support plates (10, 12) being arranged such that during movement of the breaking line end (54, 6) upwardly a fragment of the ceramic conductor plate is exposed for gripping.
- 860 8. Breaking device (2) according to claim 7, further comprising a transport element which is formed such that operationally it can be arranged adjacent to the fragment (38) of the ceramic conductor plate (18) and be displaced to transport away the fragment (38).
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- 870 9. Breaking device (2) according to claim 8, characterized in the positioning  
element (44) being simultaneously the transport element.
10. Breaking device (2) according to one of claims 1 to 9, further comprising a  
coupling device (30) which is connected to the support plates (10, 12) of the  
875 breaking trap (4, 6) such that the movements of the support plates (10, 12)  
are synchronized.
11. Breaking device (2) according to one of claims 1 to 10, characterized in a  
control being provided, which coordinates the movements of the breaking  
880 trap (4, 6) with the movement of further elements (52, 8, 44) of the breaking  
device (2) and comprises an input interface through which the measure-  
ments of the ceramic conductor plates (18) to be singularized and the posi-  
tion and/or the distances of the weakening lines (20) arranged thereon  
and/or the breaking direction can be input.
- 885 12. Breaking device (2) according to one of claims 1 to 11, characterized in that  
a retardation means (42) for the ceramic conductor plate (18) is provided.
13. Breaking device (2) according to one of claims 1 to 12, characterized in that  
890 a turning device is provided with which operationally the ceramic conductor  
plate (18) to be processed and/or its fragments (38) can be rotated about an  
axis which is perpendicular to the support plates (10, 12).
14. Breaking device (2) according to one of claims 1 to 13, characterized in that  
895 a second breaking trap (6) is provided which is arranged in the breaking  
device (2) such that its breaking line (14) viewed in the plane of the support  
plates (10, 12) is arranged with an angle relative to the breaking line of the  
first breaking trap (4).
- 900 15. Method for singularizing ceramic conductor plates (18) along weakening  
lines (20) of the ceramic conductor plate (18), comprising the following  
steps:

- 905 (a) providing a breaking trap (4, 6) having two support plates (10, 12) dis-  
placeable relative to one another which can be displaced from an initial  
position in which the support plates (10, 12) adjoin along a breaking line  
(14) and form an essentially flat support surface (16) to a breaking posi-  
tion in which both support plates (10, 12) are arranged with an angle  
toward one another;
- 910 (b) positioning a ceramic conductor plate (18) on the support plates (10, 12)  
in the initial position such that a weakening line (20) along which  
breaking should occur is essentially above the breaking line (14);
- 915 (c) lowering a pinning device (52) comprising two oblong engagement  
sections (58, 60) on the ceramic conductor plate (18) such that they  
transmit a pinning force onto the ceramic conductor plate (18) in the  
zone of two weakening lines (20) adjacent to the weakening line (20),  
along which breaking should occur;
- 920 (d) breaking the ceramic conductor plate (18) by raising the breaking line  
ends (54, 56) of the support plates (10, 12) of the breaking trap (4, 6)  
upwardly into the breaking position;
- 925 (e) raising the pinning device (52) and releasing the fragments (38) of the  
ceramic conductor plate (18);
- (f) returning the support plates (10, 12) into the initial position;
- 930 (g) positioning the ceramic conductor plate (18) on the support plates (10,  
12) such that a further weakening line (20) along which breaking should  
occur is positioned essentially above the breaking line (14); and
- 935 (h) repeating steps (c) to (g) until the ceramic conductor plate (18) is broken  
along the weakening lines (20) along which breaking should occur.

16. Method for singularizing ceramic conductor plates (18) along weakening lines of a ceramic conductor plate (18) comprising the following steps:

940 (a) providing a breaking trap (4, 6) with two support plates (10, 12) dis-  
placeable relative to one another, which can be moved from an initial  
position in which the support plates (10, 12) adjoin along a breaking line  
(14) and form an essentially flat surface (16) into a breaking position in  
945 which the two support plates (10, 12) are arranged with an angle toward  
one another;

(b) positioning a ceramic conductor plate (18) on the support plates (10, 12)  
in the initial position such that a weakening line (20), along which  
breaking should occur, is essentially above the breaking line (14);

950 (c) breaking the ceramic conductor plate (18) by lowering a breaking knife  
(52, 8) essentially aligned with the weakening line (20) against the  
weakening line (20) and against a predetermined force of the support  
plates (10, 12) and thereby downwardly displacing the support plates  
955 (10, 12) into the breaking position;

(d) raising the breaking knife (52, 8);

(e) returning the support plates (10, 12) to the initial position;

960 (f) positioning the ceramic conductor plate (18) on the support plates (10,  
12) such that a further weakening line, along which breaking should  
occur, is positioned essentially above the breaking line (14); and

965 (g) repeating the steps (c) to (f) until the ceramic plate is broken along the  
weakening lines (20), along which breaking should occur.

17. Method according to claim 15 or 16, further comprising the step of displac-  
ing the support plates (10, 12) upwardly to a gripping position to enlarge  
970 the gap between the fragments (38, 18) of a ceramic conductor plate (18).

18. Method according to claim 17, further comprising gripping in the gap between the fragments (38, 18) and transporting away one of the fragments (38).

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19. Method according to one of claims 15 to 18, wherein the movements of the support plates (10, 12) are performed synchronously.

20. Method according to one of claims 15 to 19 comprising the step of retarding the ceramic conductor plate (18) after positioning.

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